

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

n re Patent Application of	)
Scott A. Rawson	) Group Art Unit: 3683
Application No.: 09/829,883	) ) Examiner: Bradley T. King
Filed: April 10,2001	) Appeal No.:
For: Vibration Isolation Member	) Confirmation No.:

#### **BRIEF FOR APPELLANT**

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

This appeal is from the Advisory Action date mailed December 7,2004 and the decision of the Primary Examiner dated May 28, 2004, finally rejecting claims 1,2,10-13,17,18,20 and 21, which are reproduced as an Appendix to this brief.

The Commissioner is authorized to deduct the fee of \$500.00 for filing this appeal brief from deposit account 12-2143 along with the \$1,020.00 fee for a three-month extension of time.

Also enclosed herewith are two extra copies of this brief.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§1.16, 1.17, and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 12-2143.

## 1.0 Real Party in Interest

The present application is assigned to Lord Corporation, a corporation organized and existing under the laws of the Commonwealth of Pennsylvania and engaged in business in Cary, North Carolina.

# 2.0 Related Appeals and Interferences

The Appellants' legal representative, or assignee, does not know of any other appeal or interferences, which will affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

#### 3.0 Status of Claims

Claims 1,2,10-13,17,18,20 and 21 are pending and on appeal in the application. The application was filed with 22 claims. No claims were added by amendment. Claims 1,2,10,11,12,17,18 were amended, claims 3-9,14-16,19 and 22 were cancelled, and claims 13,20 and 21 are original. Pursuant to 37 C.F.R. § 1.191(a), Appellants hereby appeal the Examiner's decision finally rejecting claims 1,2,10-13,17,18,20 and 21 to the Board of Patent Appeals and Interferences.

## 4.0 Status of Amendments

A final Official Action was issued May 28,2004, rejecting claims 1,2,10-13,17,18,20 and 21 under 35 U.S.C. § 103(a). A Request for Reconsideration was filed on September 2, 2004. A Notice of Appeal was filed on November 29,2004. An Advisory Action was issued on December 7, 2004 maintaining the final rejection. The fee of \$500.00 for filing this appeal brief is to be deducted from deposit account 12-2143 along with the \$1,020.00 fee for a three-month extension of time.

A clean copy of claims 1,2,10-13,17,18,20 and 21 at issue on appeal is attached as the Appendix.

# 5.0 Summary of the Invention<sup>1</sup>

The invention is summarized in paragraphs [0006] through [0009] on page 3. The invention defined in the claims is a single resilient member isoelastic vibration isolation member 10 as shown in FIG. 1-5. Claim 1,the first independent claim, claims the single resilient member iso-elastic vibration isolation member 10 while claim 12, the second independent claim, claims the single resilient member iso-elastic vibration isolation member 10 as a combination with the single resilient member iso-elastic vibration isolation member 10 joining a planar support structure 18 having a contiguous structure plane surface to a suspended body 20 located away from the support structure 18 as shown in FIG. 3. The single resilient member isoelastic vibration isolation member 10 is comprised of an inner member 12 for attachment to a suspended body 20, with the inner member 12 comprising a frustoconical seat 32 having an angled surface 38 and an outer periphery 42 having a diameter D' as shown in FIG. 2-3 and described in paragraph [0019] on page 5-6. The single resilient member iso-elastic vibration isolation member 10 is further comprised of an outer member 14 for attachment to a planar support structure 18, with the outer member 14 comprising a planar base 50 defining a base plane and a shroud 54 that extends away from the planar base 50 and the base plane, with the shroud 54 extending to overlay the inner member 12 outer periphery 42 diameter D', the shroud 54 having an angled segment 58 with an inner surface, with the angled segment 58 inner surface oriented substantially parallel to said angled surface 38 of the frustoconical seat 32 of inner member 12, the shroud 54 defining an inner periphery 62 diameter D", with the inner periphery 62 diameter D" less than the outer periphery 42 diameter D' of the inner member 12, with the inner member 12 not extending through said outer member base 50 plane as shown in FIG. 1-3 and described in paragraphs [0020] and [0021] on page 6. The single resilient member iso-elastic vibration isolation member 10 consisting essentially of a single sole resilient member 16 constrained

<sup>&</sup>lt;sup>1</sup> This summary is provided in accordance with 37 C.F.R. § 1.192(c)(5) and is not intended to

between the shroud 54 angled segment 58 inner surface and the inner member 12 frustoconical seat 32 angled surface 38 as shown in FIG. 3 and described in paragraph [0017] on pages 4-5. The single resilient member 16 has a cross section, with the single resilient member 16 bonded to the shroud 54 angled segment 58 inner surface and the inner member 12 frustoconical seat 32 angled surface 38 as shown in FIG. 3 and described in paragraph [0022] on page 7. The single resilient member 16 bonded to the shroud 54 angled segment 58 inner surface and the inner member 12 frustoconical seat 32 angled surface 38 provides for iso-elastic displacement of the inner member 12 in a radial direction 25 and in an axial direction 26 from the outer member 14 as shown in FIG. 3 and described in paragraph [0023] on page 7. The inner member 12 frustoconical seat 32 outer periphery 42 diameter D' providing an interference with the outer member 14 shroud 54 inner periphery 62 diameter D" to prevent a separation of the vibration isolation member 10 in the event of a failure of the single resilient member 16 as shown in FIG. 2-3 and described in paragraph [0021] on page 6 and paragraph [0024] on page 7. The single sole resilient member 16 is the sole resilient member providing for isolation between the suspended body 20 and the support structure 18 with the iso-elastic vibration isolation member 10 providing a substantially equal dynamic stiffness in the radial direction 25 and in the axial direction 26 for an applied load between the suspended body 20 and the support structure 18 as shown in FIG. 3 and described in paragraphs [0007] on page 3, [0018] on page 5, and [0023] on page 7.

#### 6.0 The Issues

The issues presented on appeal are:

- 1. Whether claims 1-2,10-13,17-18,and 20-21 are properly rejected under 35 U.S.C. § 103(a) over Nowak (U.S. Patent 5,116,030), in view of Kubaugh (U.S. Patent 2,367,830).
- 2. Whether claims 1-2,10-13,17-18,and 20-21 are properly rejected under 35 U.S.C. § 103(a) over Saurer (U.S. Patent 2,538,658), in view of Nowak (U.S. Patent 5,116,030).

# 7.0 Grouping of Claims

The claims stand or fall together.

## 8. Arguments

Nowak (U.S. Patent 5,116,030) in view of Kubaugh (U.S. Patent 2,367,830)

Claims 1-2,10-13,17-18, and 20-21 were rejected under 35 U.S.C. § 103(a) over Nowak (U.S. Patent 5,116,030) in view of Kubaugh (U.S. Patent 2,367,830) in the 5/28/2004 Final Rejection. A thorough review of these two references and the prosecution of this application clearly shows that this rejection is improper and should be withdrawn. Nowak and Kubaugh are combined in the rejection of the claims to result in a vibration isolation member with the inner member, the outer member and a first resilient member (first elastomeric section 20 of FIG. 3 of Nowak) bonded to the outer member shroud angled segment inner surface and the inner member frustoconical seat angled surface, with the frustoconical seat outer periphery diameter D' providing an interference with said shroud inner periphery diameter D" to prevent a separation of the vibration isolation member in the event of a failure of the resilient member. Then on page 3 of the 5/28/2004 Final Rejection, the Office admits that this combination lacks "the single sole resilient member being the sole resilient member providing for isolation between the suspended body and the support structure." The 5/28/2004 Final

Rejection then states that "It would be obvious to one of ordinary skill in the art at the time the invention was made to eliminate the second resilient member of Nowak et al should the additional support not be necessary or desired (for example, providing vibration isolation to light weight devices)." This combination of Nowak and Kubaugh with the proposed removal of the second resilient member of Nowak (second elastomeric section 22 of FIG. 3 of Nowak) to render the claims obvious is improper hindsight-based obviousness, which is particularly clear from a review of the prosecution history of this application. The 7/17/2002 Office Action rejected claims 1-22 with the combination of Nowak in view of Kubaugh. In response to this rejection Appellants amended the claims to specify that the vibration isolation member is a single resilient member iso-elastic vibration isolation member with a single resilient member providing iso-elastic displacement between the inner member and the outer member. The following 4/03/2003 Office Action maintained the rejection of the claims with the combination of Nowak in view of Kubaugh, and made such a final rejection. In a personal interview dated 7/21/2003, Appellants discussed this rejection of the claims based on Nowak and proposed amended claims to add wording that the isolation member consists essentially of a single sole resilient member and wherein the single sole resilient member is the sole resilient member providing for isolation to overcome the rejection of the claims based on the combination of Nowak in view of Kubaugh. The 7/21/2003 hand written Interview Summary states "Discussed proposed amendment which appears to define over the rejections of record, but will most likely require further search and consideration. see attached." Following the personal interview Appellants filed an RCE on 7/28/2003 which amended the claims as proposed and argued that that the combination of Nowak in view of Kubaugh does not disclose an iso-elastic vibration isolator consisting essentially of a single sole resilient member, that the combination Kubaugh with Nowak results in a vibration isolator with two resilient members, and teaches away from the claims in that a first and second elastomeric sections are used, and that these two elastomeric sections are required by the references. In response to this Amendment and

Arguments the Office conceded in the following 10/22/2003 Office Action that the amended claims were not rendered obvious by these combined references by withdrawing the outstanding 35 U.S.C. § 103(a) rejection based on Nowak in view of Kubaugh. In the 10/22/2003 Office Action in response to Appellant's amendments and arguments to remove the rejection based on Nowak in view of Kubaugh, the Office withdrew this rejection and replaced the rejection with a new rejection of the claims based on the newly cited Efromson (US 2,538,955) reference and Efromson in view of Nowak. In response to this rejection Appellants amended the claims to specify that the outer member comprises a planar base defining a base plane and that the inner member does not extend through the outer member base plane and that the outer member forms a chamber with the support structure and the inner member seat is contained in the chamber (as previously claimed in dependent claim 17) and argued that the claims were not rendered obvious in that Efromson clearly teaches away from such configurations in that its inner member extends through the outer member base plane of the outer plate member. In the following 5/28/2004 Office Action the Office responded with the final rejection now being appealed of Claims 1-2,10-13,17-18,and 20-21 rejected again under 35 U.S.C. § 103(a) over Nowak in view of Kubaugh. By withdrawing the same rejection in the 10/22/2003 Office Action in response to Appellant's amendments and arguments to remove the rejection based on Nowak in view of Kubaugh, the Office acknowledged that the appealed claims are not rendered obvious by the proposed combination of Nowak in view of Kubaugh, in that the last amendment of the claims simply narrowed the claims to remove the Efromson reference rejections. The record clearly shows that the currently appealed rejection of the claims based on the proposed combination of Nowak in view of Kubaugh was not necessitated by the last narrowing amendment of the claims to remove the Efromson reference rejections, that Appellants have amended and argued the claims to remove the present rejection based on the Nowak in view of Kubaugh, and that the withdrawing of the Nowak and Kubaugh rejection in the 10/22/2003 Office Action in response to these arguments makes it self-evident that the appealed

claims are not rendered obvious by the proposed combination of Nowak in view of Kubaugh, and that claims 1-2,10-13,17-18,and 20-21 are improperly rejected under 35 U.S.C. § 103(a) over Nowak in view of Kubaugh. The combination of Nowak and Kubaugh with the proposed removal of the second resilient member of Nowak to render the claims obvious is improper hindsight-based obviousness combined with an improper inequitable hindsight-based prosecution of the claims by the Office. The Federal Circuit has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." In re Fritch, 972 F.2d 1260, 23 USPQ 2d 1780, 1784 (Fed. Cir. 1992)

In addition, Appellants traverse the rejection under 103(a) on the basis that the prior art must suggest the desirability of making the claimed invention, i.e., provide a teaching or suggestion to one of ordinary skill in the art to have made the changes that would have produced the claimed subject matter. Ryco Mfg. Co. v. Nu-Star, Inc., 950 F.2d 714, 718 (Fed. Cir. 1991). The 5/28/2004 Final Rejection states that "Nowak et al further lack the single sole resilient member being the sole resilient member providing for isolation between the suspended body and the support structure. It would have been obvious to one of ordinary skill in the art at the time the invention was made to eliminate the second resilient member of Nowak et al should the additional support not be necessary or desired (for example, providing vibration isolation to light weight devices)" and then refers to In re Larson. In regards to In re Larson, Appellants contend that the present invention is not a case of simply making something integral into a single unit that was multiple parts in the cited prior art. The proposed prior art combination of Nowak in view of Kubaugh with the additional modification of eliminating "the second resilient member of Nowak" is improper in that this proposed modification renders this cited prior art unsatisfactory for its intended purpose and changes the principle of operation of the Nowak reference. The elimination of the second resilient member from this prior art combination renders the combination

unsatisfactory for its intended purpose of providing "an improved fully bonded vibration isolator capable of incurring compression, shear and tension modes of loads internally while maintaining uniform characteristics regardless of direction of the load" [column 3, lines 38-41 Nowak]. A complete reading of Nowak combined with Kubaugh does not render the present claims obvious, even using the proposed motivation that the additional support of the second resilient member is not necessary or desired for light weight devices. In regards to such motivation for light weight devices Appellants note that the isolator of Nowak is designed for supporting light weight devices such as "a component box of electronic components used in an aircraft" [column 4, lines 27-28 Nowak]. In that the isolator of Nowak is already designed for lightweight devices there would be no motivation to make this proposed modification for lightweight devices. Additionally the proposed elimination of the second resilient member from the Nowak isolator is not proper in that it renders the isolator unsatisfactory for its intended purpose of incurring compression, shear and tension modes. The proposed elimination of the second resilient member from the Nowak isolator is not proper in that it changes the principle of operation of the isolator, in that Nowak needs both resilient members so that one resilient member can incur compression loads at the same time the other resilient member incurs tension loads. The principle of operation of Nowak is described at column 4, lines 51-54 in that the "orientation of the first and second elastomeric sections allow that the second elastomeric section 22 incurs compression and shear loads whereas the first elastomeric section 20 incurs tension and shear loads." Thus the proposed removal of the second resilient member would change the principle of operation of the isolator since there would only be a single resilient member that would only be capable of incurring only compression and shear loads or only tension and shear loads, and not both simultaneously. Our case law makes clear that hindsight-based obviousness analysis is to be prevented by rigorous application of the requirement for a showing of a teaching or motivation to combine the prior art references. See Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617. "Combining prior art references without evidence of such a suggestion,

teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight." In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1780, 1783 (Fed. Cir. 1988). The combination of Nowak and Kubaugh with the proposed removal of the second resilient member of Nowak to render the claims obvious is improper, and the rejection of Claims 1-2,10-13,17-18,and 20-21 under 35 U.S.C. § 103(a) over Nowak in view of Kubaugh is improper.

Appellants have shown that the prior teachings of Nowak in view of Kubaugh as combined, do not suggest what Appellants claim and the Office was well aware of this issue prior to appeal. The engineered motivation by the Office, built from the combined prior art is faulty, likewise. The effort taken to devise the grounds for the conclusion of obviousness is contrary to the teachings of the references as evidenced in the previous withdraw of the rejection and has impermissibly used the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art to support the conclusion of obviousness. The Federal Circuit has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." In re Fritch, 972 F.2d 1260, 23 USPQ 2d 1780, 1784 (Fed. Cir. 1992)

#### Saurer (U.S. Patent 2,538,658) in view of Nowak (U.S. Patent 5,116,030)

Claims 1-2,10-13,17-18,and 20-21 were rejected under 35 U.S.C. § 103(a) over Saurer (U.S. Patent 2,538,658) in view of Nowak (U.S. Patent 5,116,030) in the 5/28/2004 Final Rejection. This rejection of claims 1-2, 10-13, 17-18, and 20-21 is improper in that the proposed combination of Saurer in view of Nowak does not render the presently claimed invention obvious. The final rejection in the 5/28/2004 Office Action states that Saurer discloses a "single resilient member bonded to said shroud angled segment inner surface and said inner member surface". A complete reading of Saurer shows that the resilient member of Saurer is not bonded to the shroud angled

segment inner surface. As shown in Fig. 2 of Saurer resilient member 3 is not bonded to the shroud angled segment inner surface below flange 5 so that air flowing through breather opening 10 forms an annular air space shown as a void. Fig. 4 further shows that the shroud angled segment inner surface below flange 5 is coated with a flux coating 12 which is a " "anti-stick" composition for preventing adhesion of rubber to metal" [column 4, lines 8-9 of Saurer]. Saurer specifically teaches away from the presently claimed bonding of the resilient member to the shroud angled segment inner surface, such as at column 3, lines 20-30 with the "body 3 of resilient material is bonded to the housing 1, this is not the case throughout the entire extent of their normally contacting surfaces, which is the state illustrated in Fig. 3. Instead an annular area of said body lying directly beneath flange 5 of the housing and desirably extending outwardly therebeyond to the point where the flaring portion of the housing side wall merges with the cylindrical wall thereof (see Fig. 2), there is no bond between said body and housing. Accordingly, upon axial movement of member 2 in a downward direction, as viewed in Fig. 2 and 3, and resultant distortion of the body 3 of resilient material, the unbonded annular area of the latter will draw away from the adjacent inner surface of the housing to provide an encircling cavity between the main portion of body 3 and flange 5, in which air may flow and from which it may be expelled through a breather opening 10." Further at column 4, lines 32 – 40 Saurer teaches that the "interior air space of course becomes operative only after the load is applied to the mounting, whereupon the annular area of the body 3 which normally contacts with the portion of the inner surface of the housing to which flux coating 12 was applied will be free to draw away from such surface, the extent of the resulting cavity depending upon the degree of distortion or deflection to which the body 3 is subjected". Clearly Saurer's teaching of preventing the bonding of the resilient material body 3 by the use of the anti-stick flux coating 12 on the shroud angled segment inner surface, teaches the opposite of the present invention as claimed with the single resilient member bonded to said shroud angled segment inner surface. With the proposed combined teaching of Saurer in view of Nowak having this opposite teaching of nonbonding of the

resilient member to the shroud angled segment inner surface, the combination of Saurer in view of Nowak teaches away from the present invention. Thus the proposed combination of Saurer in view of Nowak does not render obvious the presently claimed invention with said single resilient member bonded to said shroud angled segment inner surface and said inner member surface.

Additionally the proposed combination of Saurer in view of Nowak does not consist essentially of a single sole resilient member constrained between the shroud angled segment inner surface and the inner member seat surface that is the sole resilient member providing for isolation between the suspended body and the support structure. As shown in Fig. 3 of Saurer distinct parts of resilient body 3 are not constrained between the shroud angled segment inner surface of housing 1 and inner member 2, and these unconstrained parts of resilient body 3 provide for non-iso-elastic isolation in that the upper unconstrained part is specifically designed as a sealing plug to form the interior air space with airflow directed through breather opening 10 and to provide a nonlinear cushioned snubbing effect when the supported member S' is pushed downward towards outer member flange 5 in the axial direction. The unconstrained upper part of resilient body 3 between flange 5 and supported member S ' in Fig. 2 of Saurer is progressively compressed between flange 5 and supported member S ' as supported member S ' is forced downward and also seals the growing interior air space cavity so airflow is controlled by the breather opening 10. Also the unconstrained lower part of resilient body 3 below flange 6 in Fig. 2 of Saurer is progressively compressed between flange 6 and supporting member S as supported member S' is forced downward. These unconstrained parts of resilient body 3 clearly provide for isolation between the suspended body and the support member, with their progressive non-linear compression making the isolation non-iso-elastic in the axial direction for an applied load. As disclosed at column 3, lines 42-49 of Saurer under "normal load the portion of the resilient body 3 which lies above the inwardly directed flange 5 of housing 1 will be subjected to a certain degree of compression and this is likewise true of the

lower annular portion of said body which lies below the outwardly directed flange 6 on the axially movable member 2." Additionally the unconstrained upper part of the resilient body 3 provides for sealing of the growing interior air space cavity. Thus the proposed combination of Saurer in view of Nowak does not render the claimed invention obvious, and actually teaches away from the invention as presently claimed consisting essentially of the single sole resilient member constrained between the shroud angled segment inner surface and the inner member frustoconical seat angled surface providing the iso-elastic isolation between the suspended body and the support structure. The proposed combination of Saurer in view of Nowak would have the resilient body 3 not only unbonded to the shroud angled segment inner surface using the anti-stick flux coating 12 but would also have the unconstrained upper portion of resilient body 3 between flange 5 and supported member S' providing isolation between supported member S' and supporting member S, along with the lower portion of resilient body 3 between flange 6 and supporting member S.

Appellants have shown that the prior teachings of Saurer in view of Nowak as combined, do not suggest what Appellants claim. The proposed combination by the Office is faulty. The effort taken to devise the grounds for the conclusion of obviousness is contrary to the teachings of Saurer in view of Nowak and has impermissibly used the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art to support the conclusion of obviousness. The Federal Circuit has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." In re Fritch, 972 F.2d 1260, 23 USPQ 2d 1780, 1784 (Fed. Cir. 1992)

my

## 9. Conclusion

For the reasons set forth above, it is respectfully submitted that the rejections of claims 1-2,10-13,17-18,and 20-21 are improper and should be reversed.

Respectfully submitted,

Edward F. Murphy III

Registration No. 38,251

Date: April 29,2005

**Lord Corporation** 

## CERTIFICATE OF MAILING (37 CFR 1.8(a)

The person signing below hereby certifies that this paper (along with any paper referred to as being attached or enclosed) is being deposited on the date indicated below with the United States Postal Service in an envelope addressed to the Assistant Commissioner of Patents, Washington, DC 20231, with sufficient postage as first class mail (37 CFR 1.8(a)) on April 29,2005.

Printed name: Ed Murphy

Signature

#### APPENDIX-CLAIMS ON APPEAL

#### What is claimed is:

- 1. A single resilient member iso-elastic vibration isolation member comprising:
  - (a) an inner member for attachment to a suspended body, said inner member comprising a frustoconical seat having an angled surface and an outer periphery diameter D';
  - (b) an outer member for attachment to a planar support structure, said outer member comprising a planar base defining a base plane and a shroud that extends away from the planar base and said base plane, the shroud extending to overlay the inner member outer periphery diameter D', said shroud having an angled segment with an inner surface, said angled segment inner surface oriented substantially parallel to said angled surface of said frustoconical seat, said shroud defining an inner periphery diameter D'', said inner periphery diameter D'' less than said outer periphery diameter D', said inner member not extending through said outer member base plane; and
  - (c) consisting essentially of a single sole resilient member constrained between the shroud angled segment inner surface and the inner member frustoconical seat angled surface, said single resilient member having a cross section, said single resilient member bonded to said shroud angled segment inner surface and said inner member frustoconical seat angled surface, wherein said single resilient member bonded to said shroud angled segment inner surface and said inner member frustoconical seat angled surface provides for iso-elastic displacement of said inner member in a radial direction and in an axial direction from said outer

member with said frustoconical seat outer periphery diameter D' providing an interference with said shroud inner periphery diameter D" to prevent a separation of the vibration isolation member in the event of a failure of said single resilient member, wherein said single sole resilient member is the sole resilient member providing for isolation between the suspended body and the support structure with said iso-elastic vibration isolation member providing a substantially equal dynamic stiffness in the radial direction and in the axial direction for an applied load between the suspended body and the support structure.

2.	The vibration isolation member of claim 1 wherein the inner
	member is comprised of a stem.
3	CANCELED

4. CANCELED.

5. CANCELED.

6. CANCELED

7. CANCELED.

8. CANCELED

9. CANCELED

10. The vibration isolation member as claimed in claim 1 said outer member forming a chamber with said planar support structure when

attached to said planar support structure, said chamber containing said inner member seat.

11. The vibration isolation member as claimed in claim 1 wherein said inner member seat and said base plane are separated by a distance.

# 12. A combination comprising:

- (a) a planar support structure having a contiguous structure plane surface;
- (b) a suspended body located away from the support structure;and
  - (c) a single resilient member iso-elastic vibration isolation member joining the support structure and the suspended body to reduce the transmission of vibratory disturbances between the suspended body and support structure, the vibration isolation member comprising;
  - (i) an inner member comprising a frustoconical seat having an angled surface and an outer periphery diameter D';
  - (ii) an outer member comprising a planar base and a shroud that extends away from the planar base, the shroud extending to overlay the inner member outer periphery diameter D', said shroud having an angled segment with an inner surface, said angled segment inner surface oriented substantially parallel to said angled surface of said frustoconical seat, said shroud defining an inner periphery diameter D", said inner periphery diameter D" less than said outer periphery diameter D', said outer member planar base joined to said planar support structure contiguous structure plane surface with said outer member shroud and said planar support structure contiguous structure plane surface comprising a

chamber with the inner member seat contained in said chamber; and

- (iii) consisting essentially of a single sole resilient member constrained between the shroud angled segment inner surface and the inner member frustoconical seat angled surface, said single resilient member having a cross section, said single resilient member bonded to said shroud angled segment inner surface and said inner member frustoconical seat angled surface, wherein said single resilient member bonded to said shroud angled segment inner surface and said inner member frustoconical seat angled surface provides for iso-elastic displacement of said inner member in a radial direction and in an axial direction from said outer member with said frustoconical seat outer periphery diameter D' providing an interference with said shroud inner periphery diameter D" to prevent a separation of the vibration isolation member in the event of a failure of said single resilient member wherein said single sole resilient member is the sole resilient member providing for isolation between the suspended body and the support structure with said iso-elastic vibration isolation member providing a substantially equal dynamic stiffness in the radial direction and in the axial direction for an applied load between the suspended body and the support structure.
- 13. The combination as claimed in claim 12 wherein the inner member includes a cylindrical stem.
- 14. CANCELED
- 15. CANCELED

- 16. CANCELED
- 17. The combination as claimed in claim 12 wherein said inner member seat does not extend into said support structure plane surface.
- 18. The combination as claimed in claim 17 wherein the support structure plane surface and said inner member seat are separated by a distance.
- 19. CANCELED
- 20. The vibration isolation member as claimed in claim 1 wherein the shroud is conical.
- 21. The vibration isolation member as claimed in claim 1 wherein the shroud is comprised of a single wall.
- 22. CANCELED

# THE ASSISTANT COMMISSIONER FOR PATENTS Washington, DC 20231

MAY 0 2 2005

Inventors: Scott A. Rawson Serial No.: 09/829,883

**Examiner:** Bradley T. King File Date: April 10,2001

Assignee:

Lord Corporation

**Group Art Unit: 3683** 

For:

"Vibration Isolation Member"

Attny: Docket No.: IR-2819 (MFW)

April 29,2005

# PETITION AND FEE FOR EXTENSION OF TIME (37 CFR 1.136(a))

This is a petition for an extension of the time for a total period of three (3) months to file a Response under 37 CFR §1.17(a)(3).

Extension Fee due with this request:

\$1,020.00

### DEPOSIT ACCOUNT AUTHORIZATION

Deposit Account No. 12-2143

The USPTO | X | is hereby authorized to charge the total fees, charge any deficiency, or credit any overpayment in the total fees indicated above to my deposit account.

A duplicate copy of this form is enclosed.

Lord Corporation Post Office Box 8012 Cary, NC 27512-8012

Telephone: (919) 468-5979, Ext. 6205

Facsimile: (919) 469-5226

Edward F. Murphy Hr Attorney for Applicant Reg. No.: 38,251

#### Certificate of Mail under 37 CFR §1.10

I hereby certify that the above-identified Petition (along with any paper referred to as being attached or enclosed) entitled " Vibration Isolation Member " is being deposited with the United States Postal Service under 37 CFR 1.10 on April 29,2005 and is addressed to Assistant Commissioner for Patents, Alexandria, VA. 22313.

Signed

Edward F. Murphy III

Date

April 29,2005

05/03/2005 AWONDAF1 00000010 122143

02 FC:1253

1020.00 DA

PTO-Form 1082 Page 1

MAY 0 2 2005

Date: April 29,2005

Docket No.: IR-2819 (MFW)



THE COMMISSIONER OF PATENTS AND TRADEMARKS Washington, DC 20231

Sir:

Transmitted herewith for filing in the patent application of

Inventor(s):

Scott A. Rawson

Serial No.: 09/829,883

Examiner:

Bradley T. King

Group Art Unit: 3683

For:

"Vibration Isolation Member"

Customer # 00193

Enclosed are:

X Post Card For Acknowledgement

X Brief For Appellant (in triplicate) with fee (500.00)

X Petition and Fee for Extension of Time (37 CFR 1.136(a)) 3 Months (1020.00)

X PTO-Form SB-21 Transmittal Form

The Commissioner is hereby authorized to charge payment of \$1520.00 to Deposit Account 12-2143. A duplicate copy of this sheet is enclosed.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 12-2143.

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Edward F. Murphy III
Attorney for Applicant(s)

Registration No. 38,251

Date: April 29,2005

Docket No.: IR-2819 (MFW)

Signature of Person Mailing Paper

## **CERTIFICATION OF MAILING UNDER 37 CFR 1.8(A)**

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service, on April 29,2005, in an envelope addressed to the Assistant Commissioner for Patents, Mail Stop: APPEAL BRIEF PATENTS Alexandria, VA. 22313, with sufficient postage as first class mail (37 CFR 1.8(a)).

EDWARD F. MURPHY III	
Name of Person Mailing Paper	_

April 29,2005 Date